A NEW SPECIES OF *MORUM* FROM THE ANDAMAN SEA (GASTROPODA: VOLUTACEA)

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ABSTRACT

Morum (Oniscidia) ninomiyai, *new species, is described from off Thailand in the Andaman Sea and is compared with closely related congeners.*

In 1981, the late Carl C. Withrow of Florida submitted to me for identification a specimen of an apparently new species of *Morum* from the Andaman Sea, off southern Thailand. This unique specimen was subsequently illustrated by Sally Diana Kaicher (1983) in her "Card Catalogue of World-Wide Shells", as an apparently undescribed *Morum*. The Andaman Sea specimen was again transmitted to me for study in 1983 by Taizo Ninomiya of Tokyo, who had obtained Mr. Withrow's collection of *Morum*. Mr. Ninomiya kindly permitted me to retain the specimen with the expectation that additional material might be forthcoming from his contacts in Bangkok. Fortunately, a second specimen resulted from the inquiries of Mr. Ninomiya, for whom I take great pleasure in naming this interesting discovery.

The new species is a member of an Indo-Pacific group within the subgenus *Oniscidia* Mörch, 1852, composed of the following taxa: *cancellatum* (Sowerby, 1824; type species); *grande* (A. Adams, 1855); *uchiyamai* Kuroda and Habe, *in* Habe, 1961; *joelgreenei* Emerson, 1981; and *watanabei* Kosuge, 1981.

The genus *Morum (sensu lato)* has long been classified with the mesogastropods in the Cassidae (Thiele, 1929; Boss, 1982; Emerson, 1985). Anatomical studies of *Morum*, however, indicate that this genus is referable to the neogastropod family Harpidae (Hughes, 1986, and personal communications). Dr. Hughes has in preparation a manuscript in which he rectifies the present taxonomic misplacement of the genus. Recent observations on New and Old World species of *Morum (sensu stricto* and *Oniscidia)*, moreover, confirm that these gastropods also autotomize the posterior portion of the foot (R. Goldberg, P. Williams and W. Liltved, personal communications), a well-known behavorial characteristic of the genus *Harpa* (Rehder, 1973).

It should be noted that Harpidae Bronn, 1849 (type genus *Harpa* (Röding, 1798); (Gastropoda), is a homonym of Harpidae Hawle and Corda, 1847 (type genus *Harpes* Goldfuss, 1839) (Trilobita). Raven (1985) has applied to the International Commission On Zoological Nomenclature to emend the spelling of this gastropod family to Harpaidae Bronn, 1849 and to place the emended taxon on the Official List of Family-Group Names in Zoology.

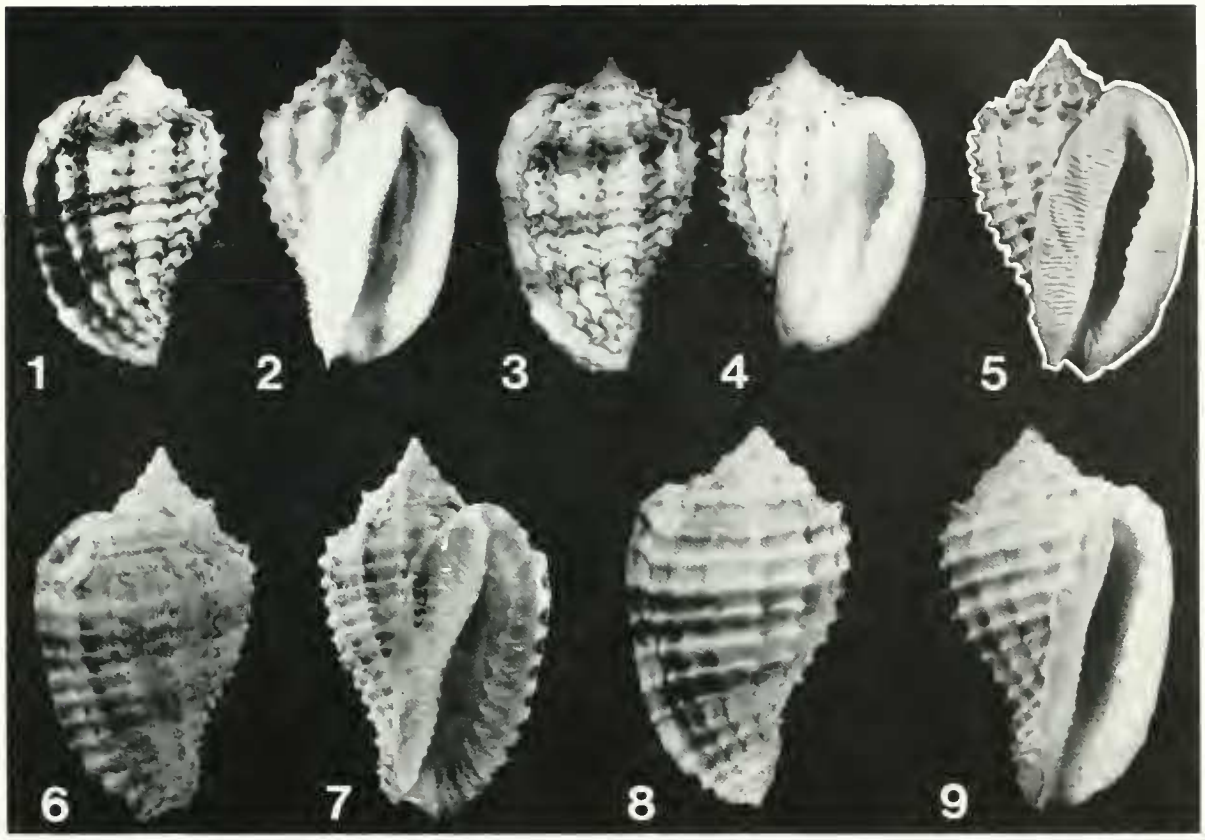
Morum (Oniscidia) ninomiyai, *new species*

Figs. 1-5

Morum sp. Kaicher, 1983, #3730, 3 figs., "off Thailand". (Illustrations of the paratype of this species.)

Diagnosis: Member of the *Morum (O.) cancellatum* (Sowerby, 1824)–*M. (O.) watanabei* Kosuge, 1981, complex. Distinguished by having the outer lip and the thin parietal shield sculptured by numerous, fine, thread-like ridges (Fig. 5).

Description: Shell medium size for genus, attaining 40+ mm in height, pyriform, attenuated at base. Spire low, extended; protoconch erect and papillate, composed of 1½ glossy, smooth whorls. Postnuclear whorls 5 in number, low conical, weakly shouldered below the suture, first and second whorls weakly cancellated, subsequent whorls strongly cancellated, with 14 prominent spinose axial ridges per whorl crossed by 10 moderately weak spiral cords to form a blade-like, hooked spine at the juncture of the spiral and axial ribs; spines most prominent at the shoulder. Intervarical areas with 8 to



FIGS. 1-5. *Morum (Oniscidia) ninomiyai*, new species. **1** and **2**, Holotype, AMNH no. 221241. **3-5**, Paratype, T. Ninomiya collection (Fig. **5**, coated to show sculptural details; photograph courtesy of S. D. Kaicher). **6-9**. *Morum (Oniscidia) cancellatum* (Sowerby, 1821); after Emerson, 1985, pl. 1, figs. 15-18. **6** and **7**, off Taiwan, AMNH no. 183783. **8** and **9**, Lectotype, BM(NH) no. 197744, "China Seas" (photographs courtesy of A. Beu). All figures except figure 5 approximately ×1.

10 evenly spaced axial lamellae. Aperture narrow, elongate, semicrescentic in outline. Parietal shield moderately large, thin with outer edge raised and covered by numerous, fine, irregular linear lirations, giving the appearance of fine threads. Outer lip thickened, crenulated and weakly toothed, with about 10 primary teeth forming inconspicuous linear projections on the inner labial margin, 2 secondary teeth formed between each pair of primary teeth. Anal sulcus shallow; siphonal canal short, widely open, weakly recurved. Operculum not known.

Color: Nucleus shiny, buff; postnuclear whorls with whitish base color, overlaid with flecks of reddish brown; 4 widely spaced, interrupted brownish spiral bands on body whorl (1 band on shoulder, 2 on either side of midbody area, 1 near the base). Aperture milky white; outer lip and parietal shield white and surface thinly glazed (in holotype).

Measurements: Holotype, 41.8 mm in height, 25.7 mm in width; paratype, 40.6 mm in height, 25.8 mm in width.

Type locality: off Phuket Island, Thailand (8°N, 98.22°E), Andaman Sea, dredged in 50 to 150 meters.

Type specimens: holotype, AMNH 221241 (Figs. 1, 2) from type locality; paratype, T. Ninomiya Collection, from "off Thailand, Andaman Sea, ex-Carl Withrow Collection, April 28, 1980", (Figs. 3-5).

Distribution: Known only from the type locality and adjacent waters.

Remarks: The new species superficially resembles specimens of *Morum (O.) cancellatum* (Figs. 6, 7, and 8, 9 (lectotype) and *M. (O.) watanabei* Kosuge (see Kosuge, 1981, pl. 33, figs. 1, 2 holotype; Emerson, 1985, figs. 11-14), but differs in the number of axial and spiral ridges, the dentition of the outer lip and the unique sculpture of the parietal shield (Fig. 5).

Acknowledgments

We are grateful to Taizo Ninomiya for depositing the holotype of this new taxon in the type collection of mollusks of the American Museum of Natural History. Richard L. Goldberg of Fresh Meadows, New York, William Liltved of San Francisco, California, and Peggy Williams of Sarasota, Florida kindly provided information on living *Morum* observed or photographed in the field and laboratory. Their generous cooperation is much appreciated. Alan G. Beu of the New Zealand Geological Survey, and Sally Diana Kaicher of St. Petersburg, Florida, generously provided the photographs for figures 8, 9 and 5, respectively.

I am also grateful to Dr. Roger N. Hughes of the University College of North Wales for his kindness in keeping me informed of his anatomical studies of *Morum*.

I thank my AMNH colleagues for their contributions to this study: Walter E. Sage III for technical assistance, Stephanie Crooms for word-processing the manuscript, and Stephen Butler for the photography, except as noted.

LITERATURE CITED

Adams, Arthur 1855. Descriptions of new genera and species of gasteropodus [*sic*] Mollusca. *Proc. Zool. Soc. London* for 1853, **21**(259):182–186 (May 16, 1855).

Boss, K. J. 1982. Mollusca, *in* S. P. Parker, ed., *Synopsis and Classification of Living Organisms, 1* McGraw-Hill Book Co., New York, pp. 945-1166, illus.

Emerson, W. K. 1981. Two new Indo-Pacific species of *Morum* (Gastropoda: Tonnacea). *The Nautilus* **95**(3): 101–105, 7 figs.

———— 1985. Remarks on some western Pacific species of *Morum* (Gastropoda: Tonnacea)., *in* J. M. Lindsay, ed., Stratigraphy, palaeontology, malacology papers in honour of Dr. Nell Ludbrook. *Spec. Publ. So. Aust. Dept. Mines and Energy* **5**, pp. 51–56, 2 pls.

Hughes, R. N. 1986. Anatomy of the foregut of *Morum* Röding, 1798 (Gastropoda: Tonnacea) and the taxonomic misplacement of the genus. *The Veliger* **29**(1), in press.

Kaicher, S. D. 1983. Card Catalogue of World-Wide Shells, Pack #36, Cassidae & Oocorythidae, card #3730.

Kosuge, Sadao 1981. Descriptions of two new species of the genus *Morum* with remarks on the Recent species from Philippines. *Bull. Inst. Malac.* Tokyo **1**(7):101–104, pl. 33.

Kuroda, Tokubei and Tadashige Habe, *in* T. Habe. 1961. *Colored Illustrations of the Shells of Japan, 2,* Hoikusha, Osaka, Appendix, p. 1–41.

Mörch, O. A. L. 1852. *Catalogus conchyliorum . . . de Yoldi.,* Regis Daniae. Copenhagen. Fac. 1, 170 p.

Raven, J. G. M. 1985. Homonymy in the families Harpidae Hawle & Corda, 1847 (Trilobita) and Harpidae Bronn, 1849 (Mollusca, Gastropoda). Z.N.(S.) 2331. *Bull. Zool. Nom.* **42**(1):79–80.

Rehder, H. A. 1973. The family Harpidae of the world. *Indo-Pacific Mollusca* **3**(16):207–274, pls. 183–247.

Sowerby, G. B. I. 1824. *The Genera of Recent and Fossil Shells 1, Oniscia,* pl. 233.

Thiele, Johannes. 1929. *Handbuch der Systematischen Weichtierkunde.* Jena, Bd 1, teil 1, pp. 1–376, 470 text figs.

A NEW DEEP-WATER SPECIES OF *LEPIDOPLEURUS* (POLYPLACOPHORA) FROM THE VENEZUELA BASIN.

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ABSTRACT

A new species of Lepidopleurus *from the depths of the Venezuela Basin, Caribbean Sea, is described and compared with* L. scrippsianus *Ferreira, 1980, from the Eastern Pacific.*

From October to December 1981, the Naval Ocean Research and Development Activity (NORDA), NSTL Station, MS, conducted intense physical and biological investigations of deep-sea sediments in the Venezuela Basin from aboard USNS Bartlett (cruise 1301-82). Among the benthic macrofauna were 6 specimens of chitons: 3 specimens, ca. 13, 11, and 9 mm long

[1]Published posthumously. Died 1986.